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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,202	04/26/2001	George H. Forman	10010075-1	2153

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
2121	3

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/844,202

Applicant(s)

FORMAN ET AL.

Examiner

Joseph P. Hirl

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-20 are pending in this application.
2. The claims and only the claims form the metes and bounds of the invention.  
“Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)” (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

### *Drawings*

3. The drawings are objected to because of the following:  
Fig. 1, item 26, change “Set” to –Subset-- to agree with the Specification at page 6 line 2.  
Fig. 2, item 34, change “Set” to –Subset—to agree with Fig. 1, item 24.  
Fig. 3, item 48, change “Set” to –Subset—to agree with Fig. 1, item 24.  
Fig. 3, item 50, change “Set” to –Subset—to agree with item 42 and 44.  
These objections must be corrected.

***Specification***

4. The specification is objected to because of the following:

Page 3, line 20, provide a reference for a C 4.5 type decision tree.

Page 6, line 24,  $S_1$  is not the probability estimates.

Page 6, line 27, ( $P_{CUM}$ ) is not the preselected threshold.

Page 6, line 30, change "set" to –subset—to agree with Fig. 1, item 24.

Page 7, line 17, change "set" to –subset—to agree with the change to Fig. 1, item 26.

Page 7, lines 25-28, none of the item numbers are on the referenced Fig. 3.

Page 8, lines 25-27, none of the item numbers are on the referenced Fig. 4.

These objections must be corrected.

***Claim Objections***

5. Claims 11, 14, 18, and 19 lack compliance with 35 USC 112, fourth paragraph by failing to additionally limit the subject matter of the preceding claim and are further objected to under 37 CFR 175 (c).

**Claims 11 and 19**

"On-the-fly" is sequential to item 26 of Fig. 1 and therefore conveys no further limitation.

**Claim 14**

“Selecting an inclusive class set encompassing the selected subset of classes” conveys no further limitation.

**Claim 18**

“Training records corresponding to the selected subset of classes” conveys no further limitation.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specification at page 6, lines 30-31 cite: “The second training records set 24, may be identified by applying a record filter 36 to the entire training set 18.” The specification is silent on the workings of the record filter. The nature and character of this filter are fundamental to the workings of the invention and without such disclosure, one of ordinary skill would have to exercise undue experimentation to achieve the

successful workings of this invention. Further to claim 7 regarding "misclassification cost", the specification at page 7 lines 14 and 15 cite: "An appropriate cost function may be incorporated into inducers 16 in a conventional way." Again, without such disclosure, one of ordinary skill would have to exercise undo experimentation to achieve the successful workings of this invention.

### ***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The practical application test requires that a useful, concrete and tangible result be accomplished. Claims 1-19 represent abstract methodology capable of being performed by hand and therefore not in the technological art. The consequence is non-statutory.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujisaki et al (USP 5,835,633, referred to as **Fujisaki**).

**Claims 1, 16, and 20**

Fujisaki anticipates selecting from the set of potential classes a subset of two or more classes to which the instance is determined to most likely belong (**Fujisaki**, c 1, l 8-18); and applying to the instance a scrutiny classifier generated from a set of training records corresponding to a class set inclusive of the selected subset of classes to identify at least one class to which the instance most likely belongs (**Fujisaki**, c 1, l 8-18).

***Conclusion***

11. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

Tamayo US Pub 2002/0083067

Johnson et al USP 6,519,580

Tatsuoka US 6,301,571

Dumais US 6,192,360

12. Claims 1-20 are rejected.

### Correspondence Information

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

Receptionist, Crystal Park II


2121 Crystal Drive,

Arlington, Virginia.

Joseph P. Hirl



October 16, 2003

  
RAMESH PATEL  
PRIMARY EXAMINER  
10/17/03  
